

FIG. 1

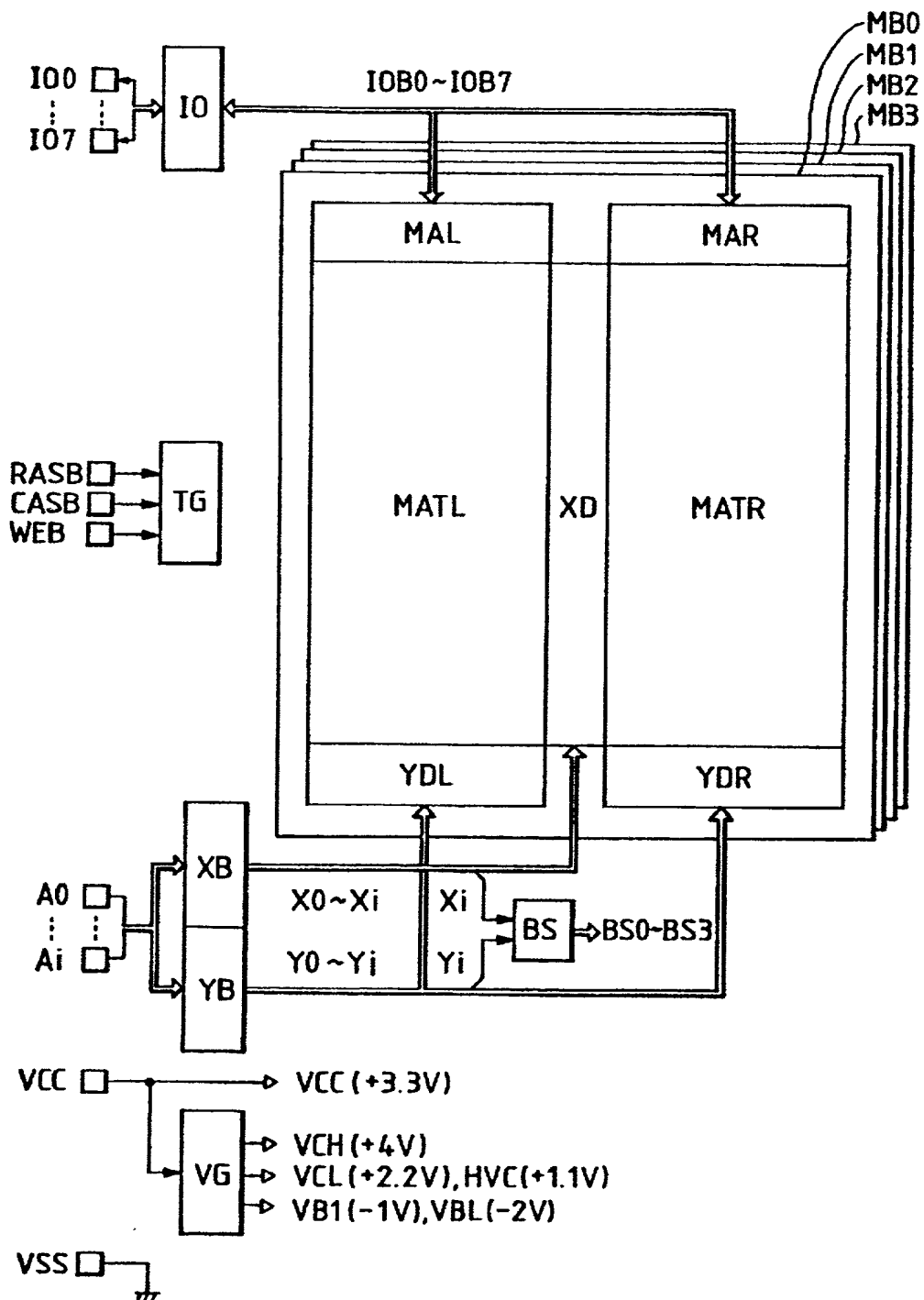


FIG. 2

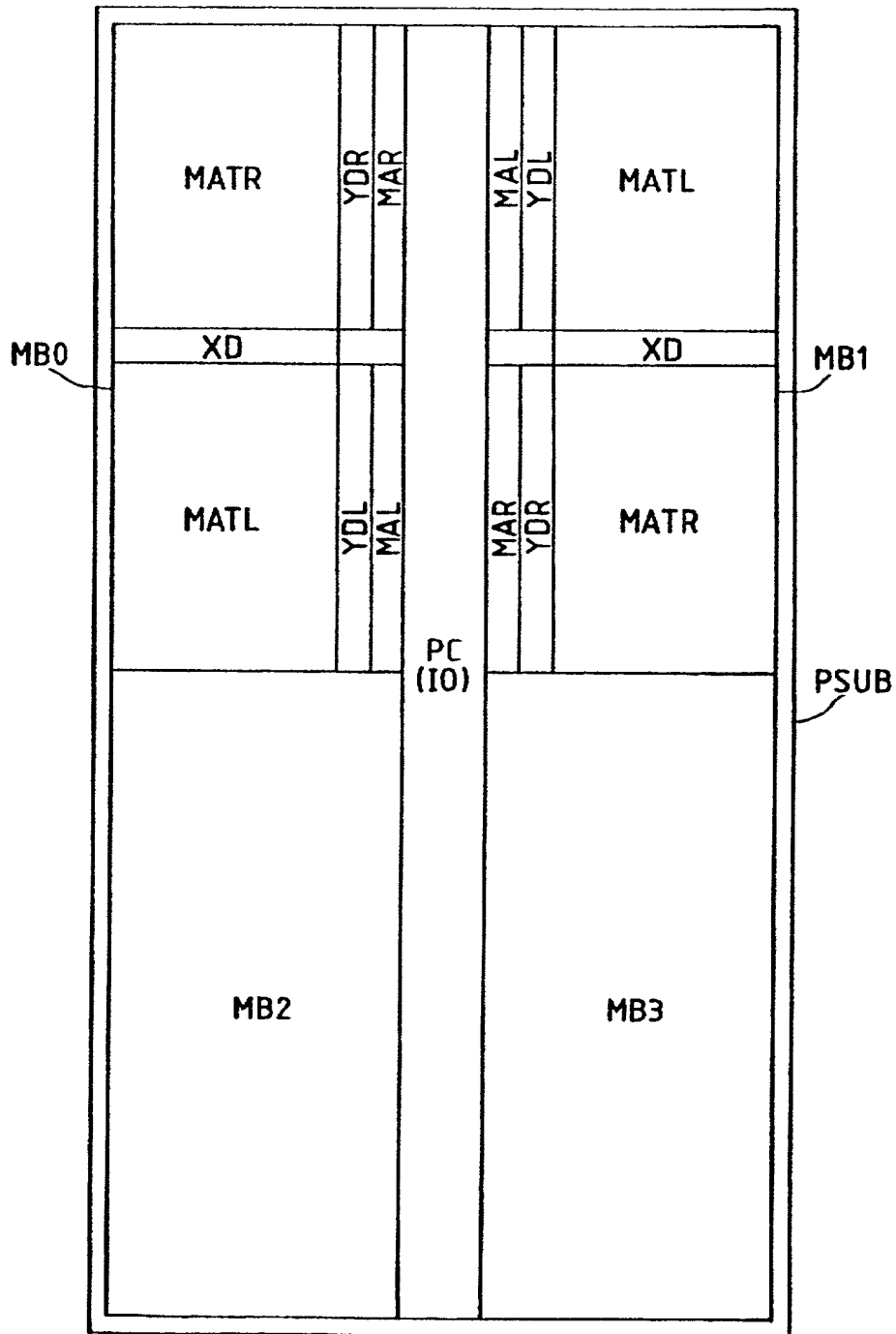


FIG. 2

FIG. 3

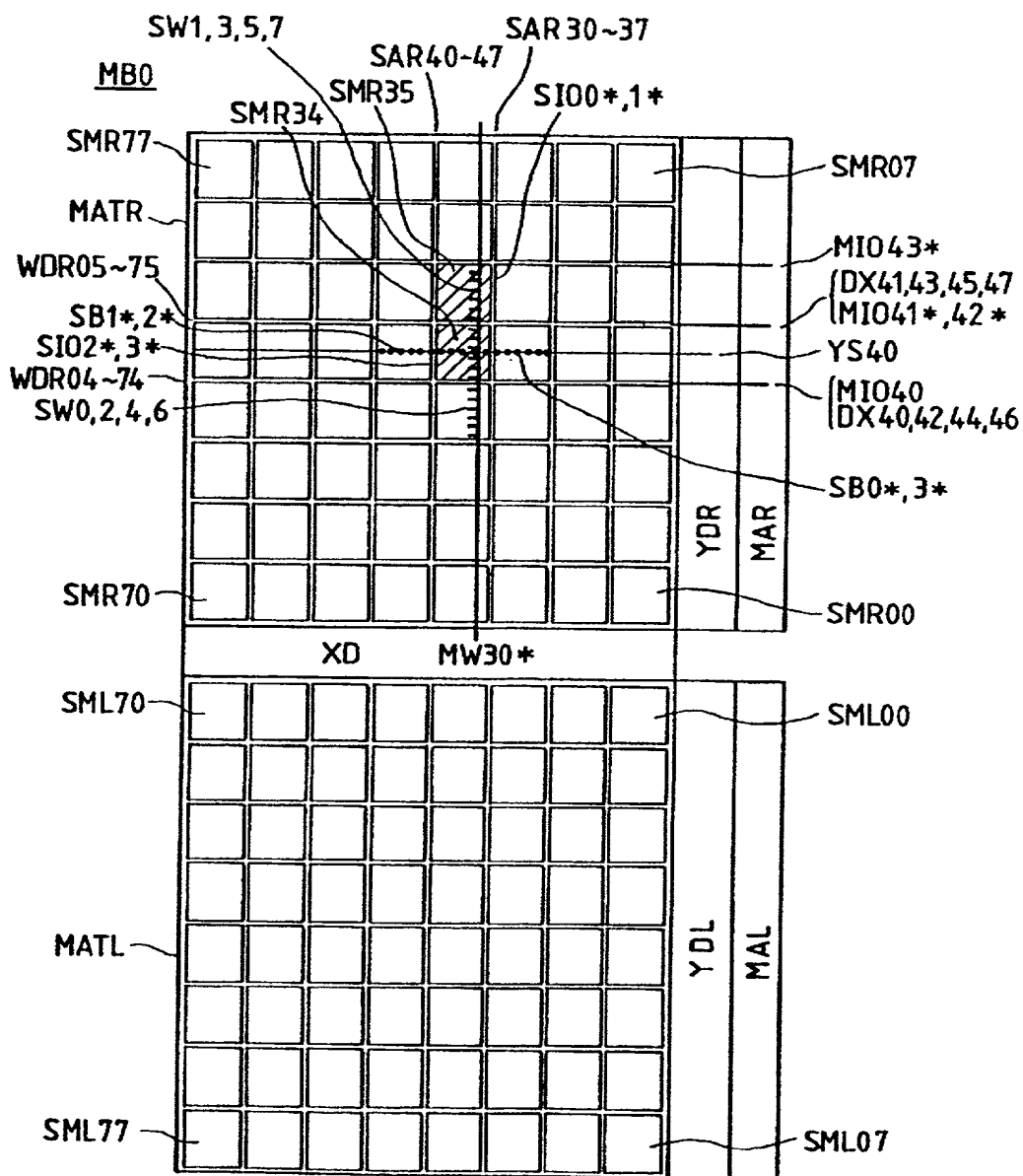
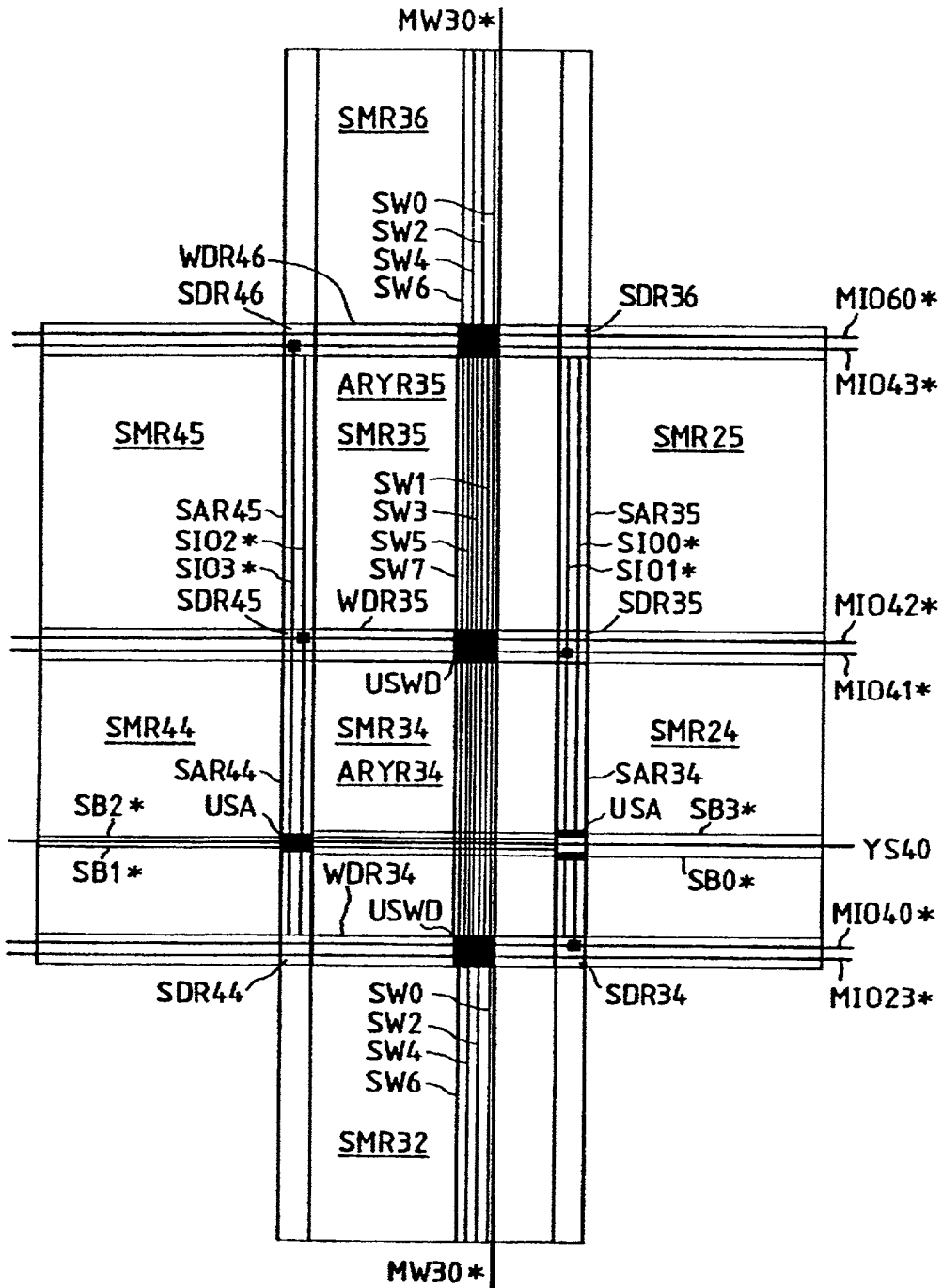


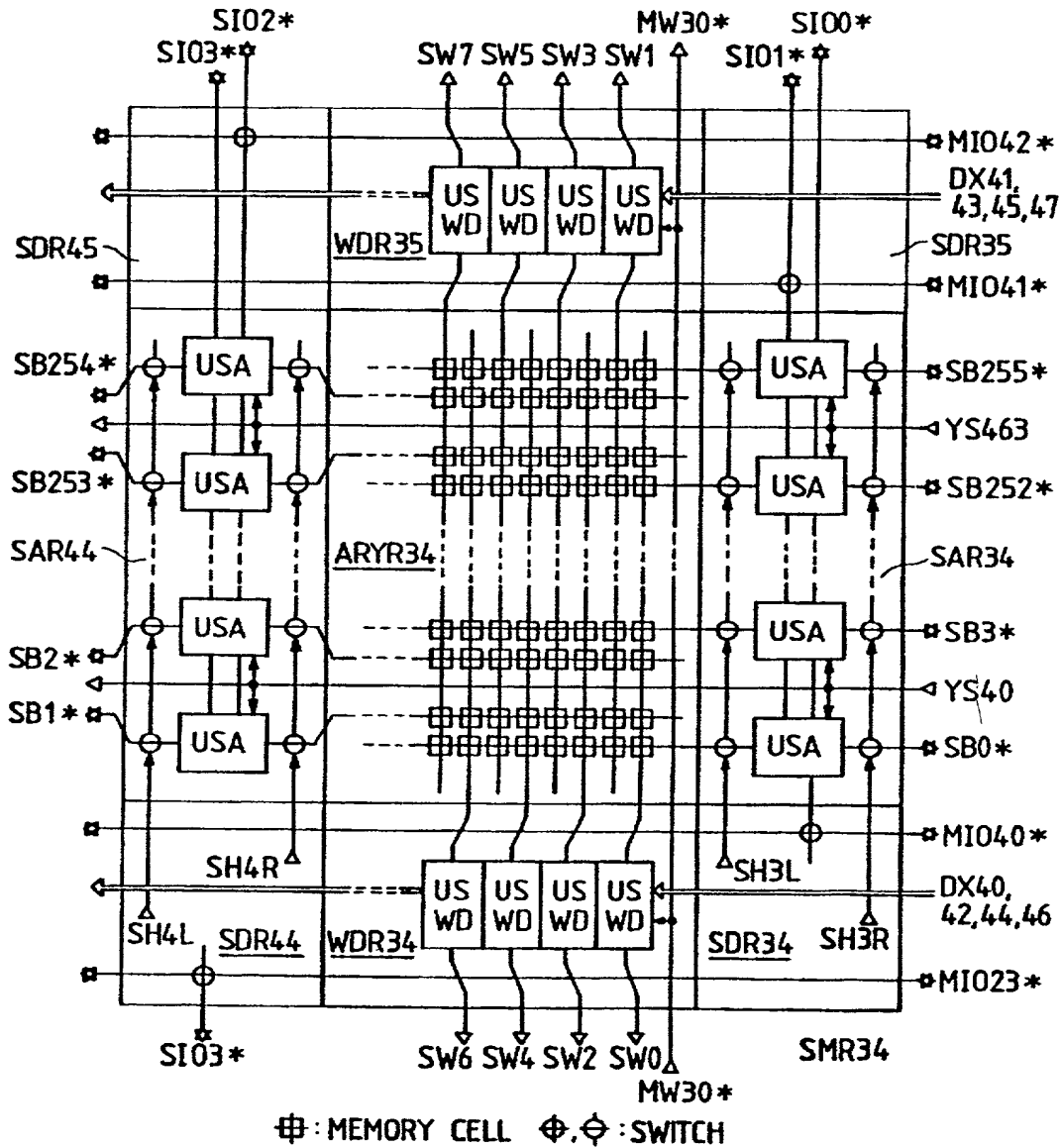
FIG. 3

FIG. 4



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FIG. 5



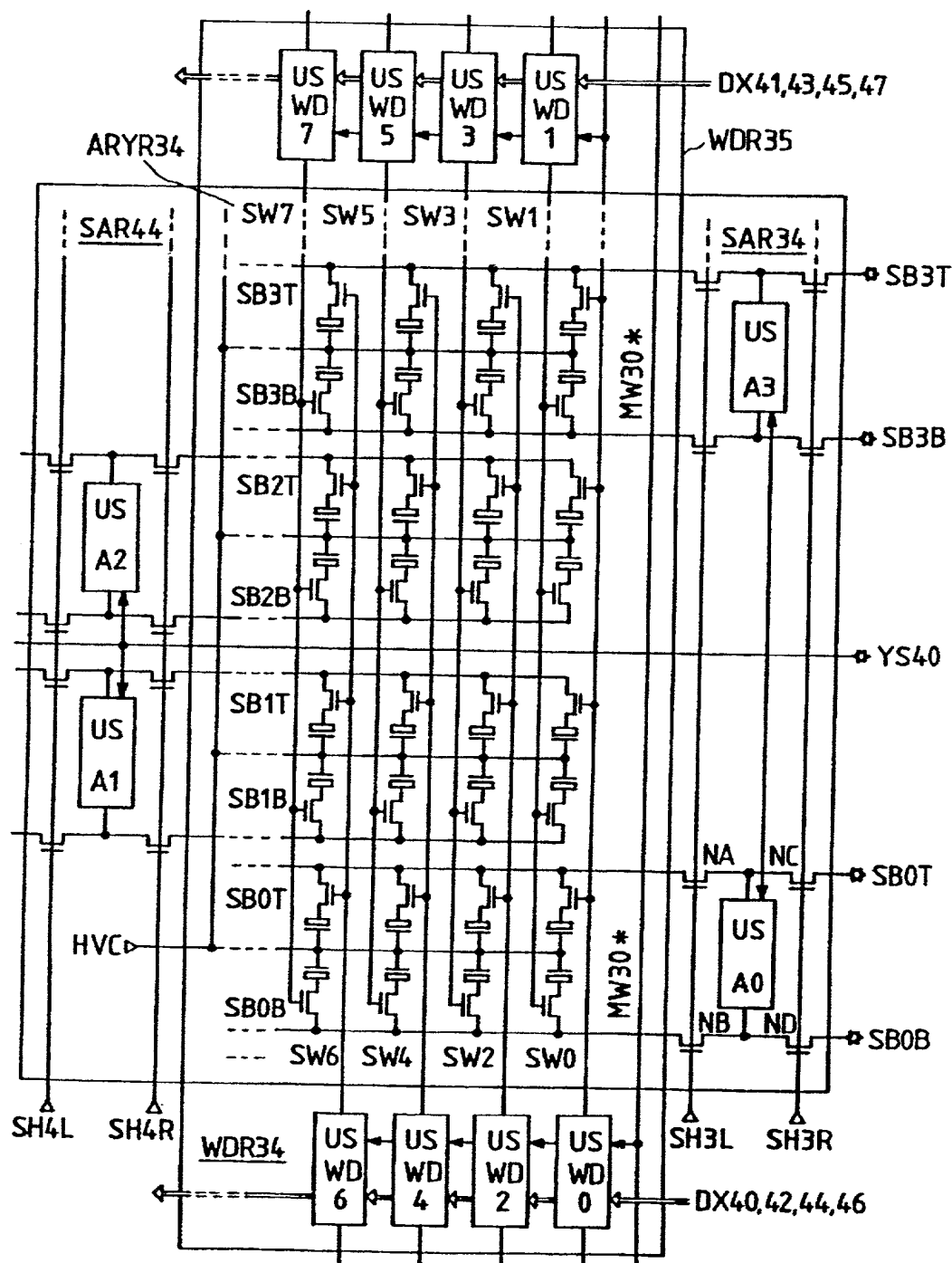
[illegible]

FIG. 7(A)

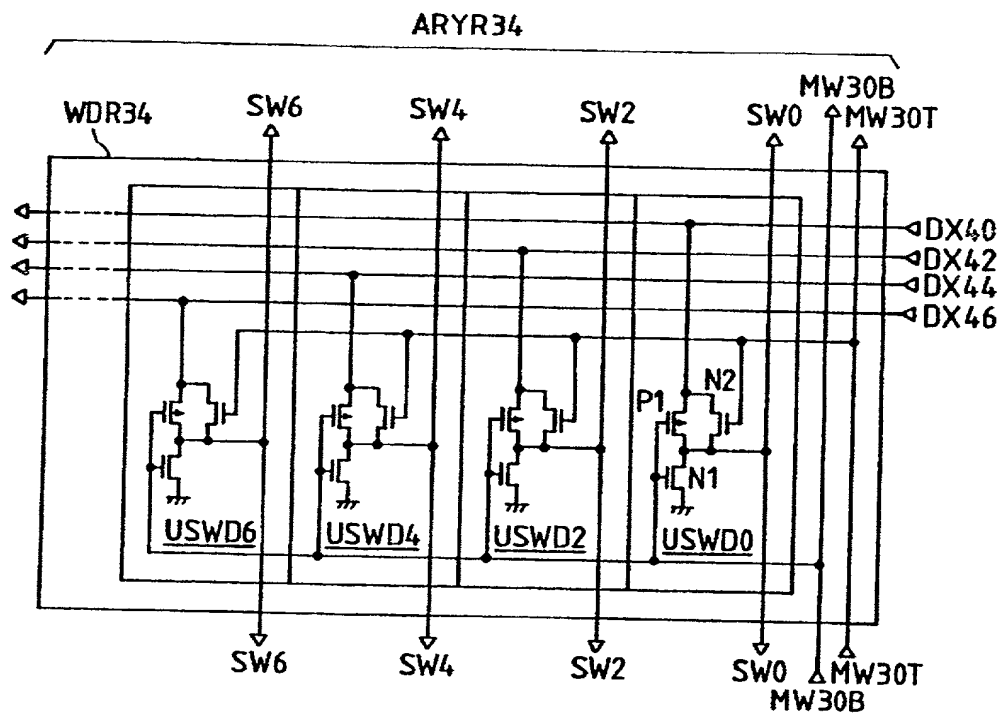


FIG. 7(B)

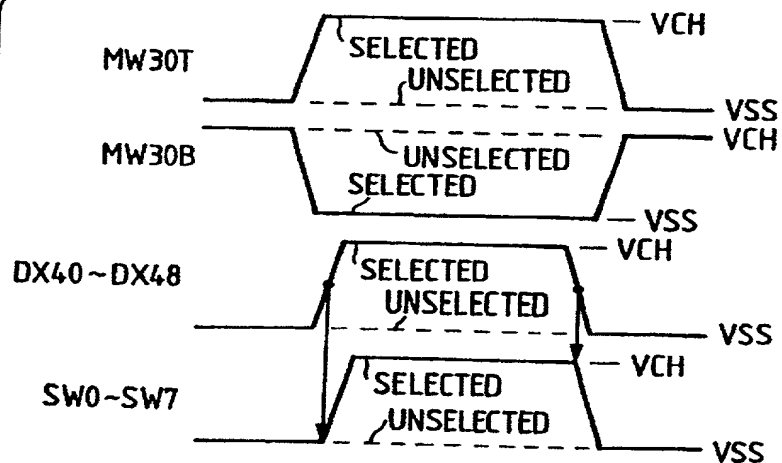


FIG. 8(A)

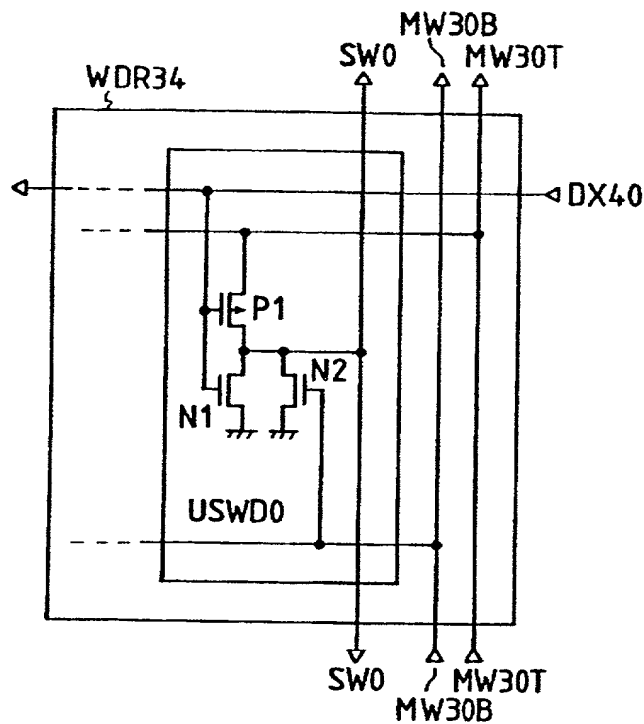


FIG. 8(B)

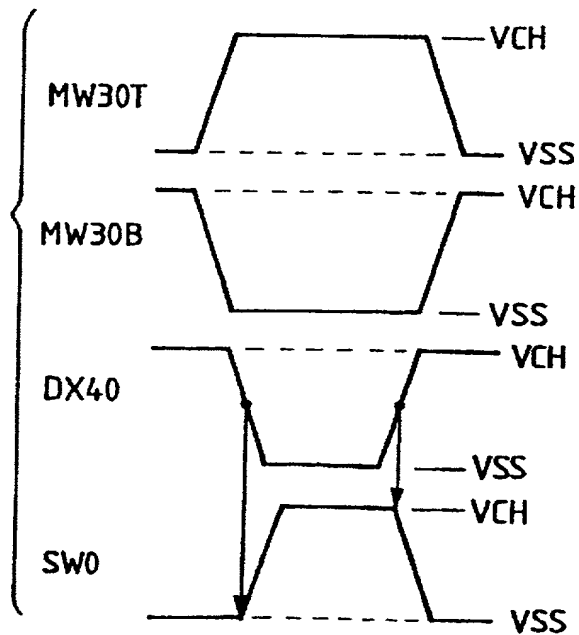


FIG. 9(A)

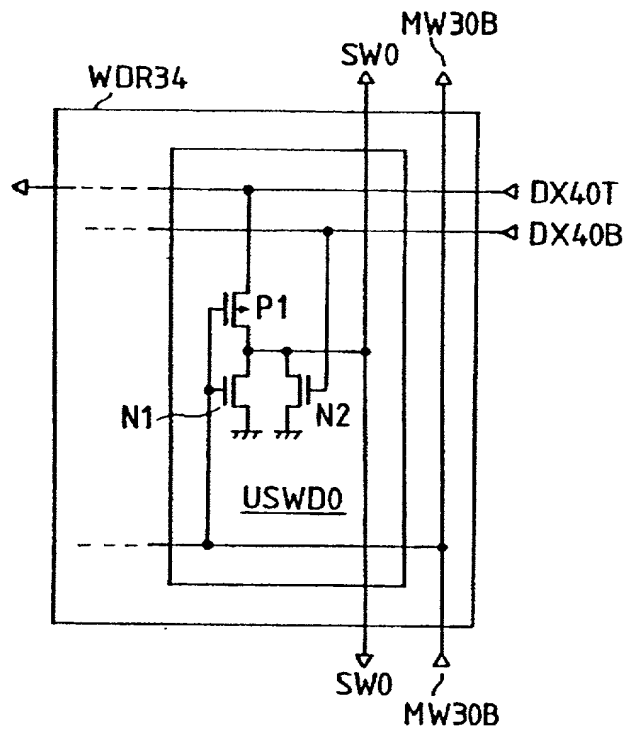


FIG. 9(B)

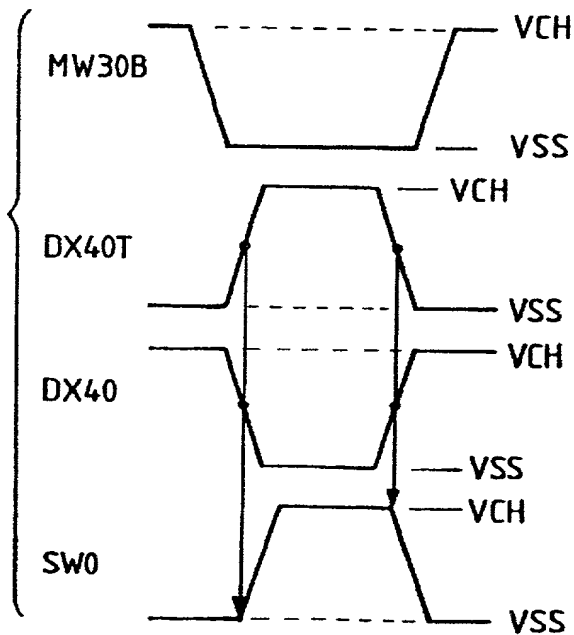
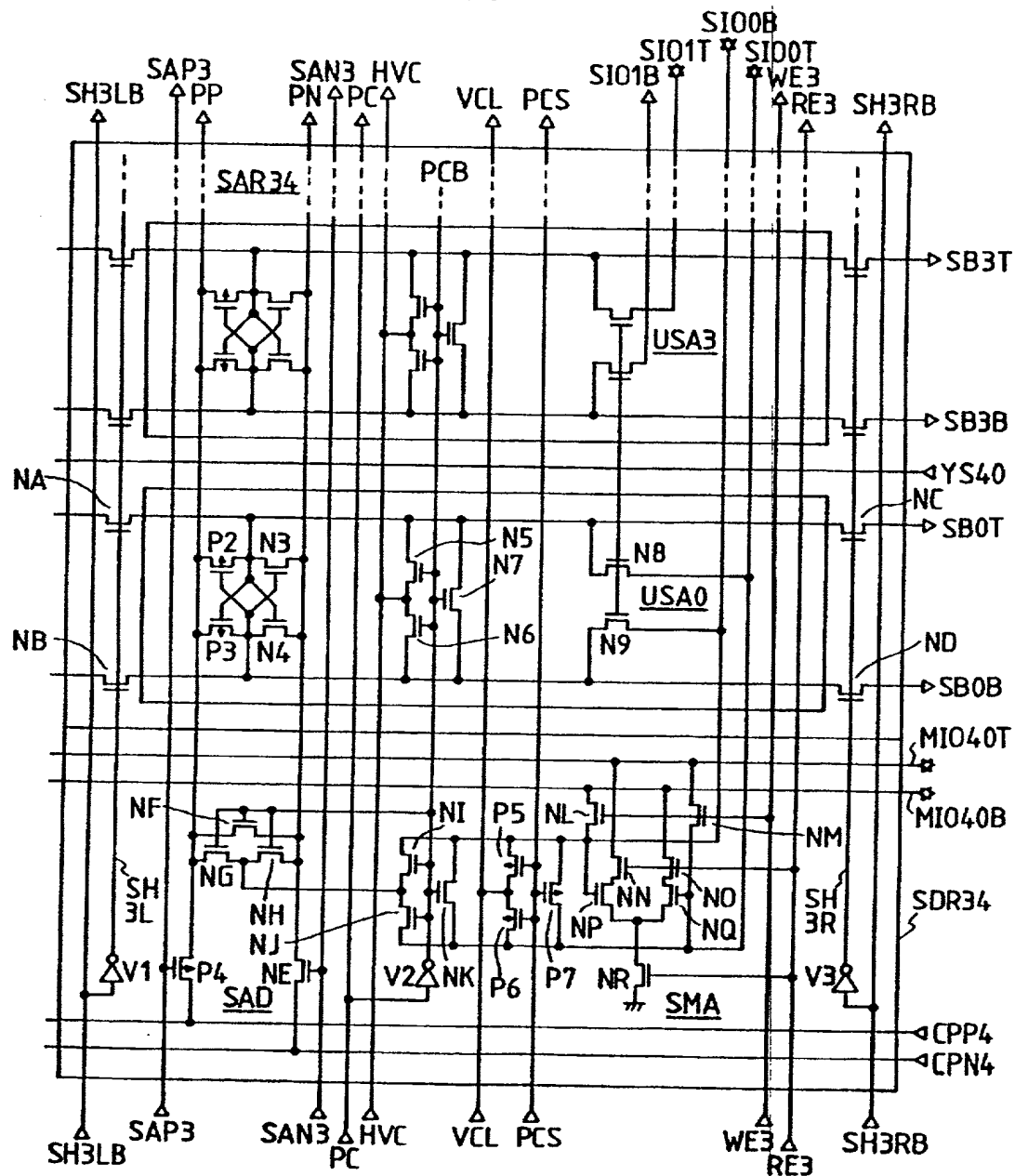
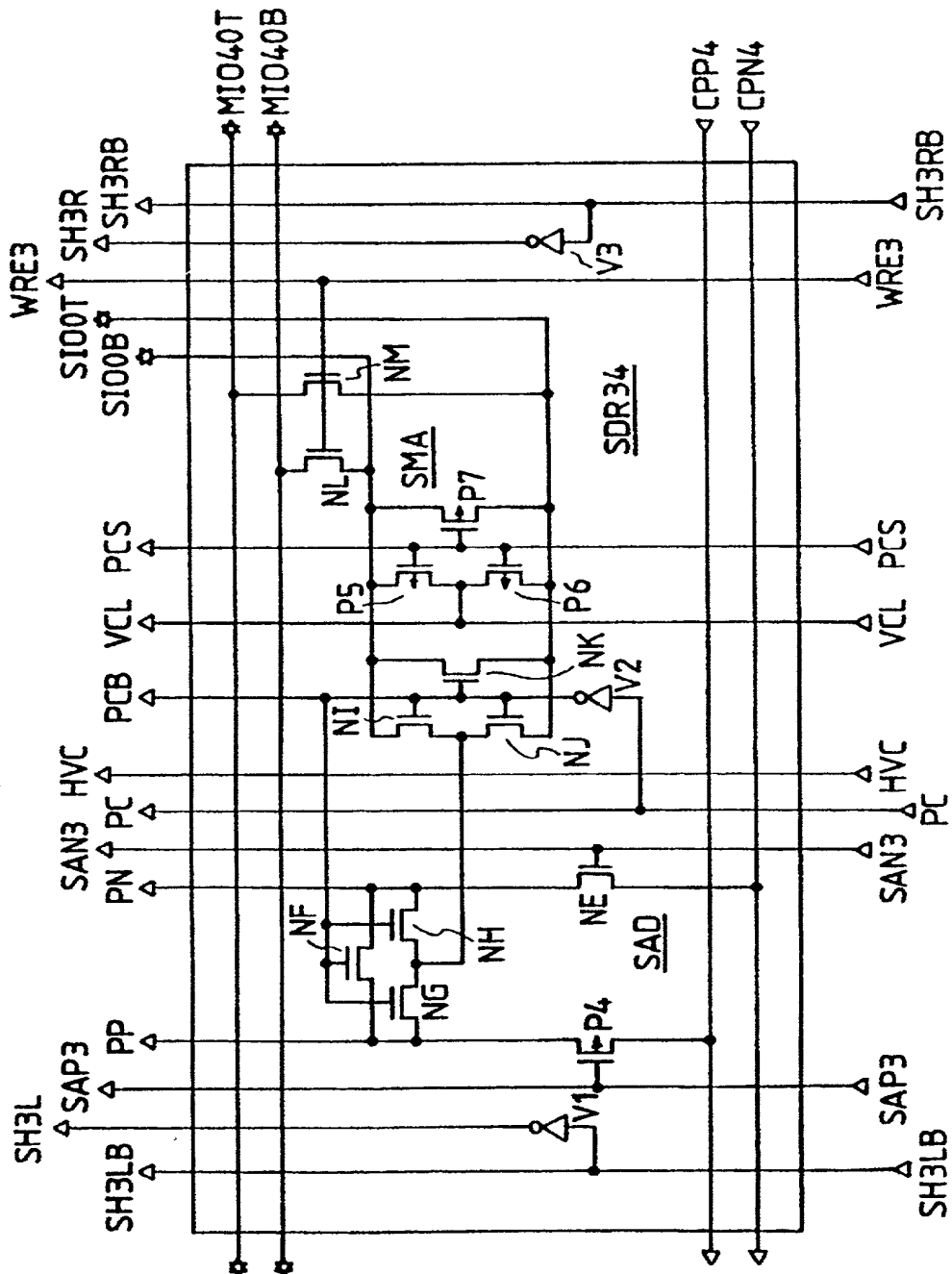


FIG. 10



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FIG. 11



Timing diagram for the word line selection process. The diagram shows the relationship between several signals and their connections to power rails:

- SAP3** and **SAN3**: Signals that transition at the word line selection event. SAP3 is connected to **VCC**, and SAN3 is connected to **VSS**.
- CPP4**: Signal connected to **VCC** and **VCL**. It shows a transition from **VCC** to **VCL** at the selection event.
- CPN4**: Signal connected to **VSS** and **VCL**. It shows a transition from **VSS** to **VCL** at the selection event.
- PP/PN**: Signals connected to **VSS** and **VCL**. **PP** (Pulse Position) is shown as a pulse that occurs before the selection event. **PN** (Pulse Number) is shown as a pulse that occurs after the selection event.
- SB0***: Signal connected to **VCL** and **VSS**. It shows a pulse that occurs after the selection event, labeled **SB0B** with a squiggly line.

A vertical line indicates the **WORD LINE SELECTED** event.

FIG. 13

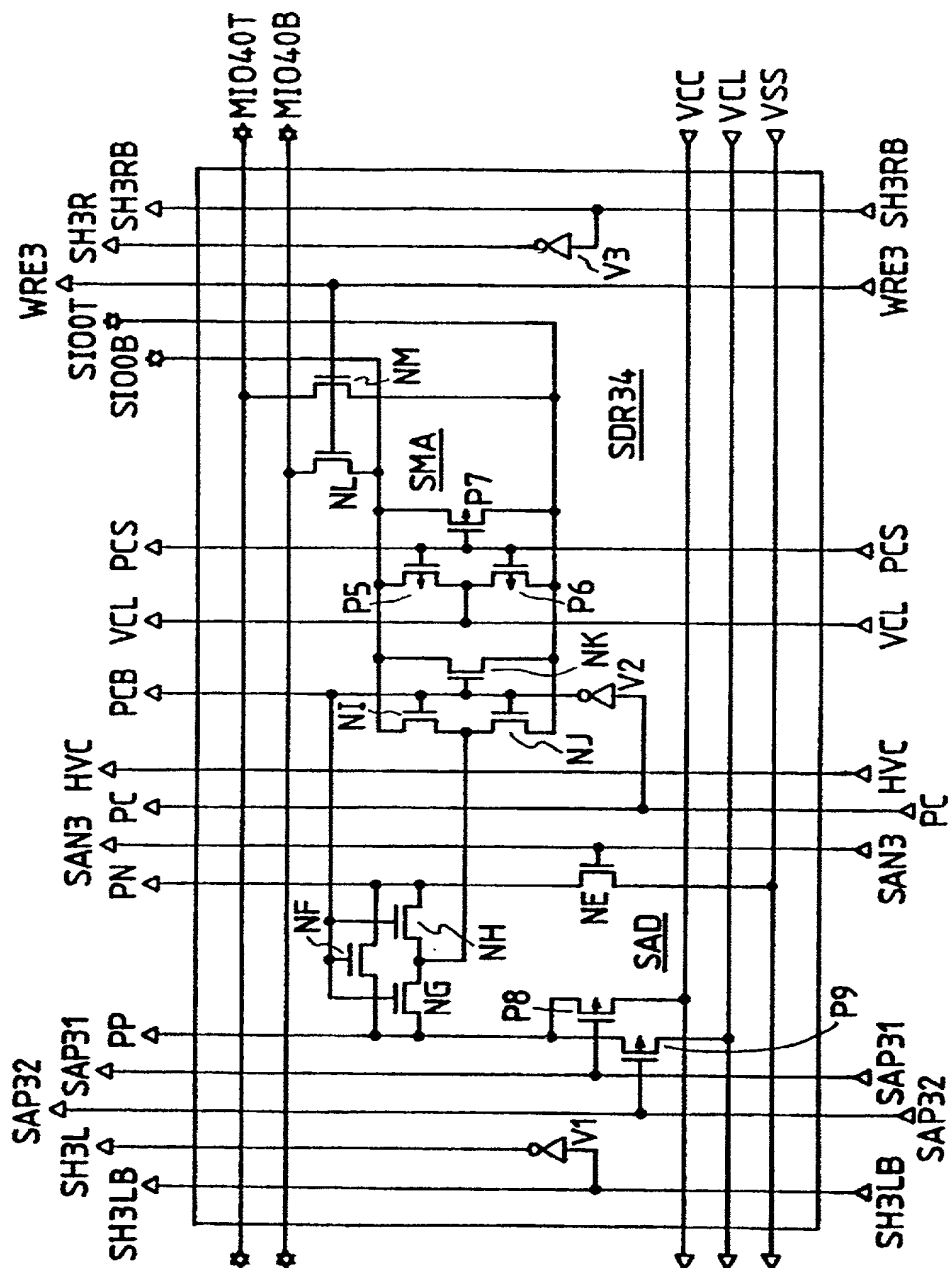


FIG. 15

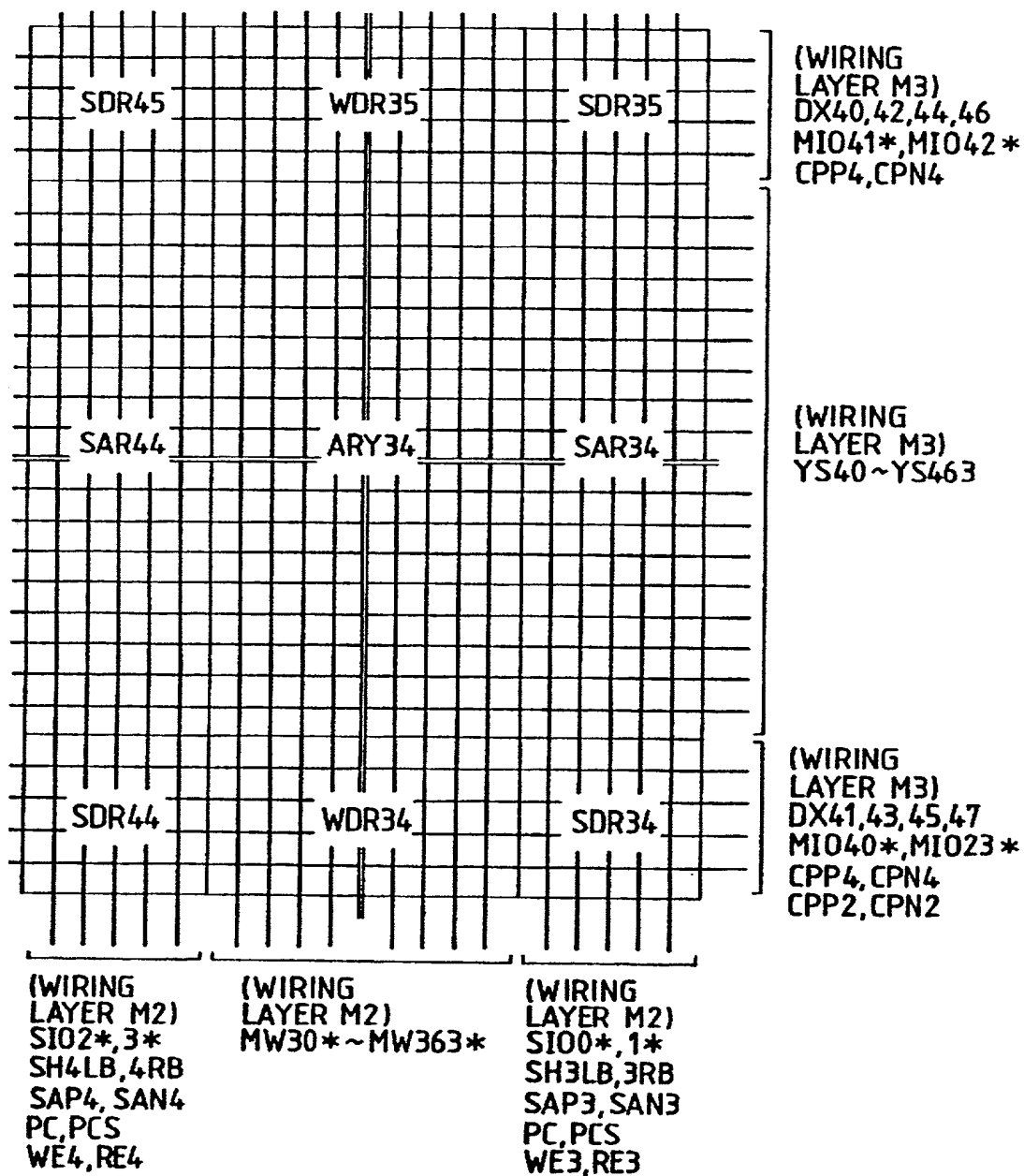


FIG. 15

FIG. 16

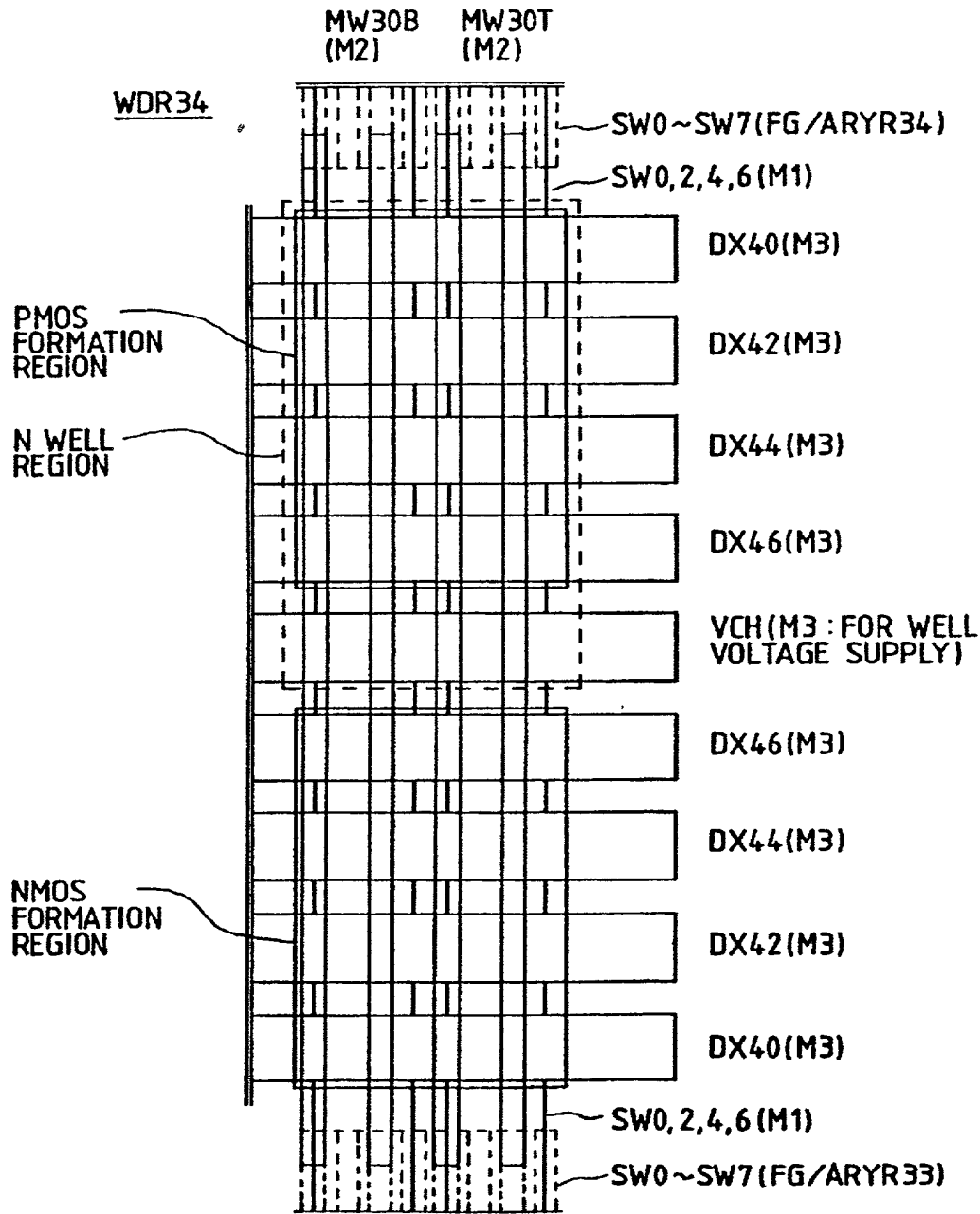


FIG. 17

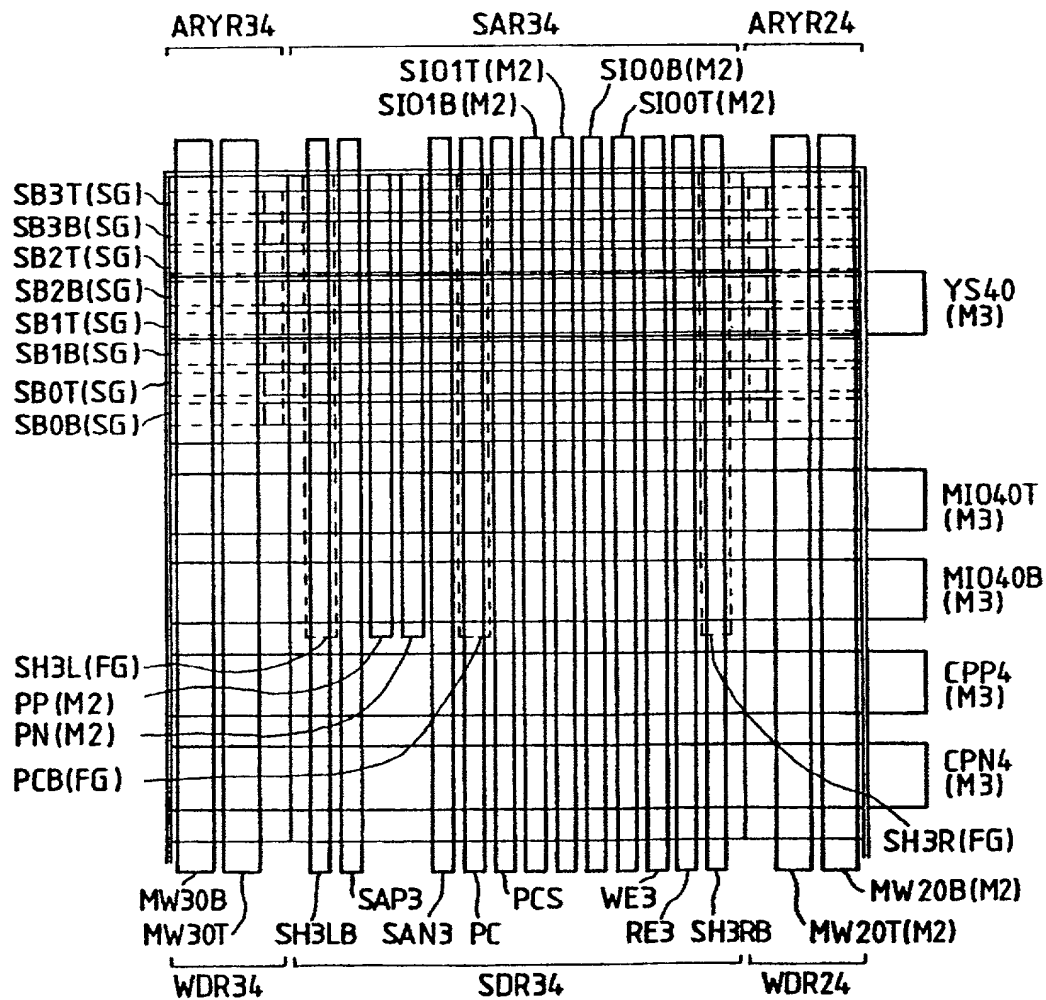


FIG. 18

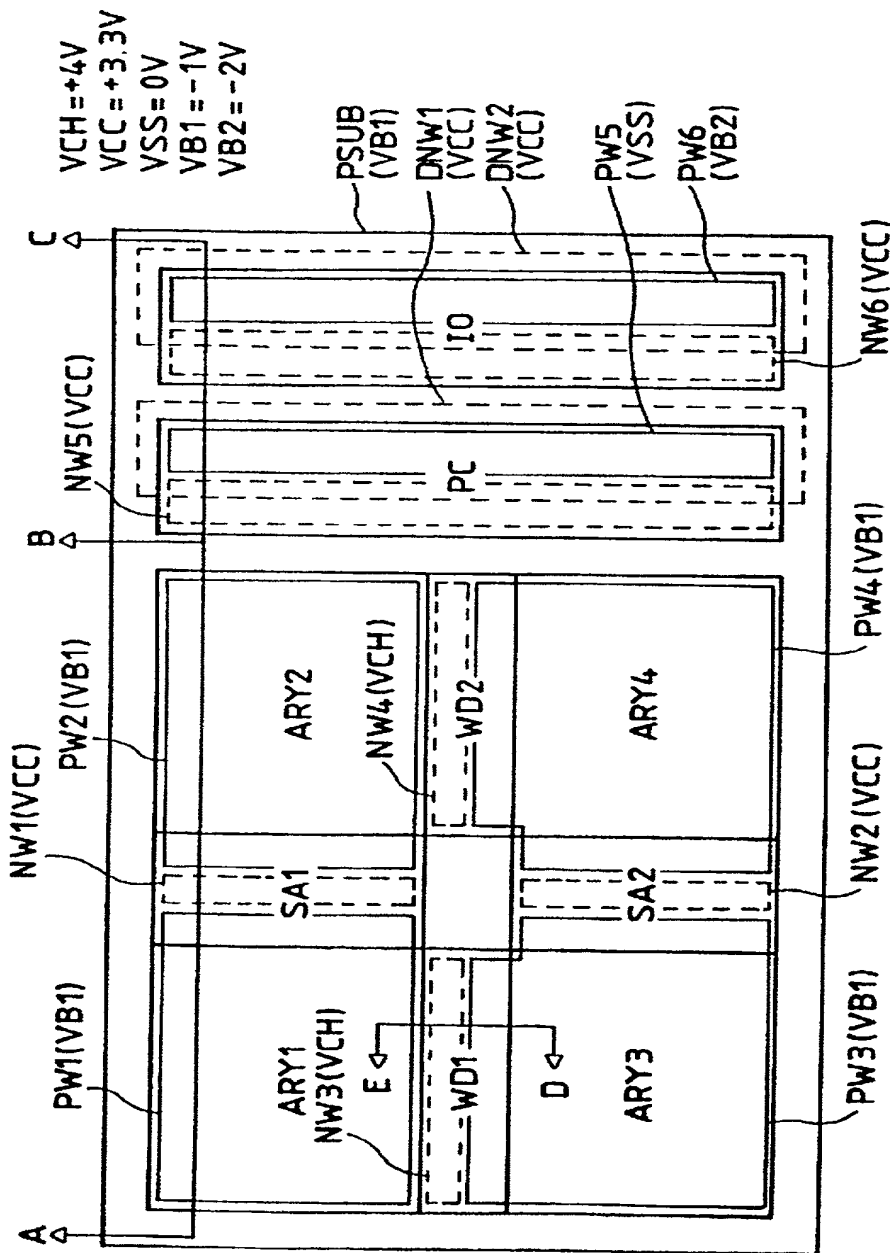


FIG. 19

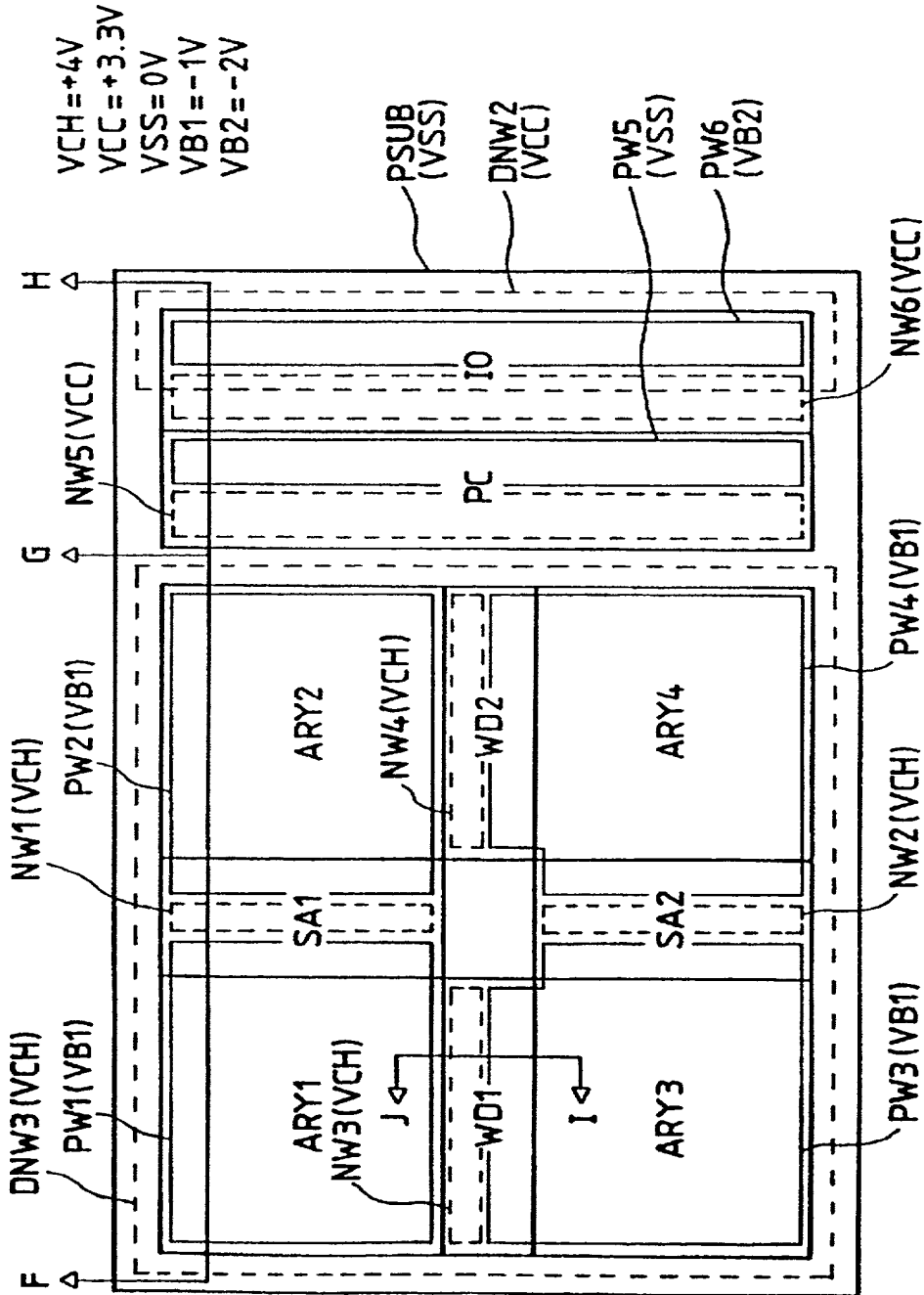


FIG. 20

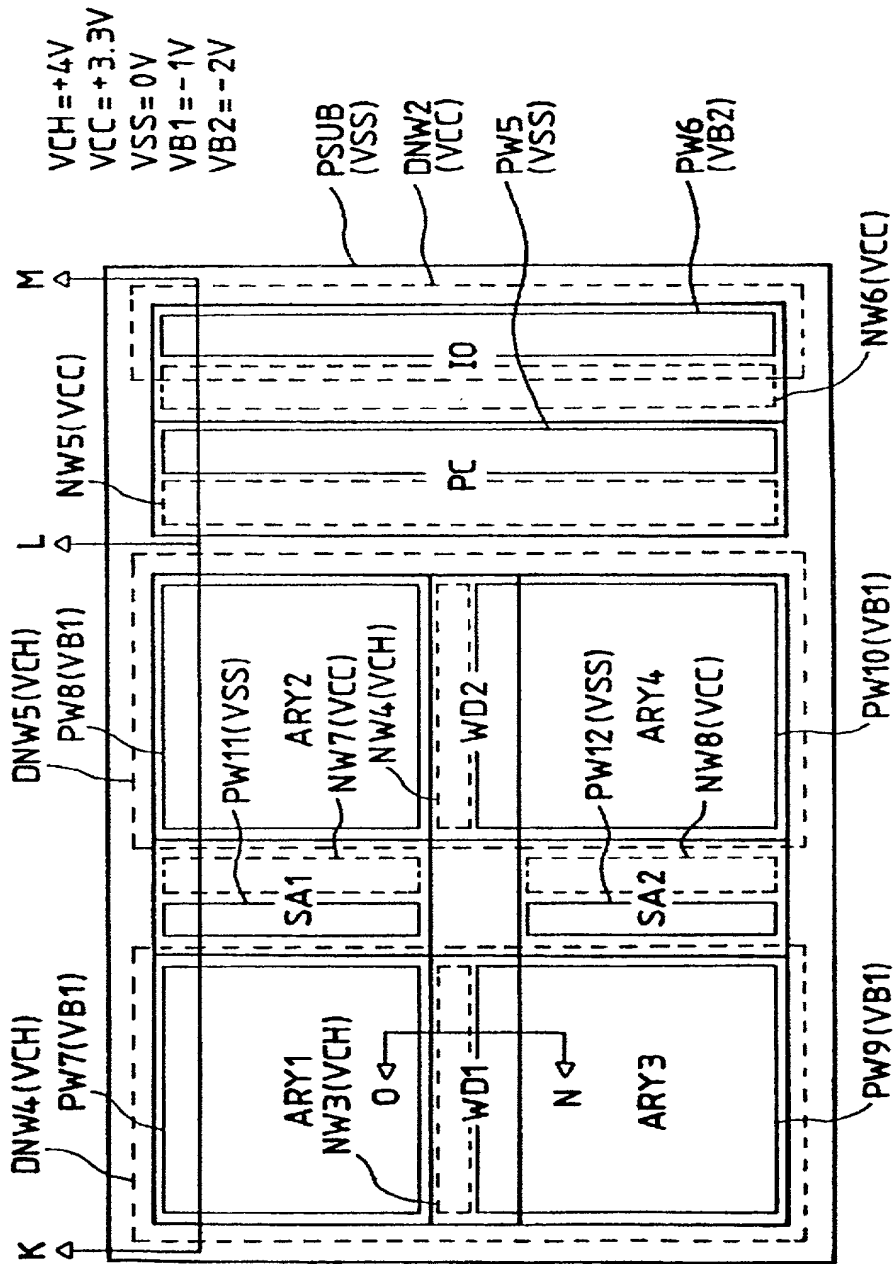


FIG. 21(A)

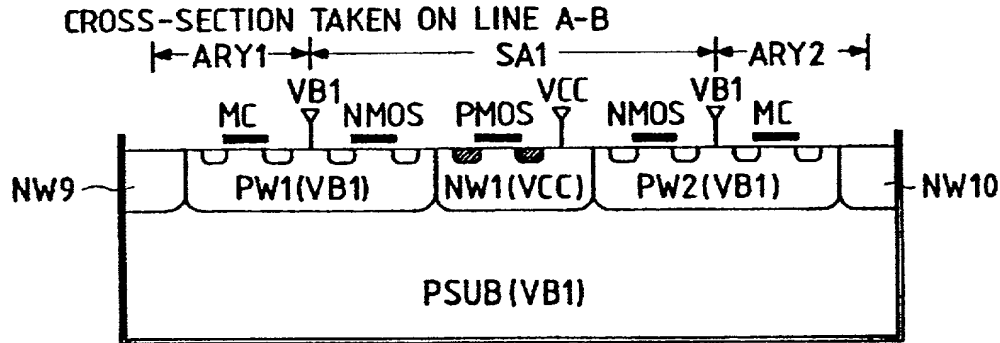


FIG. 21(B)

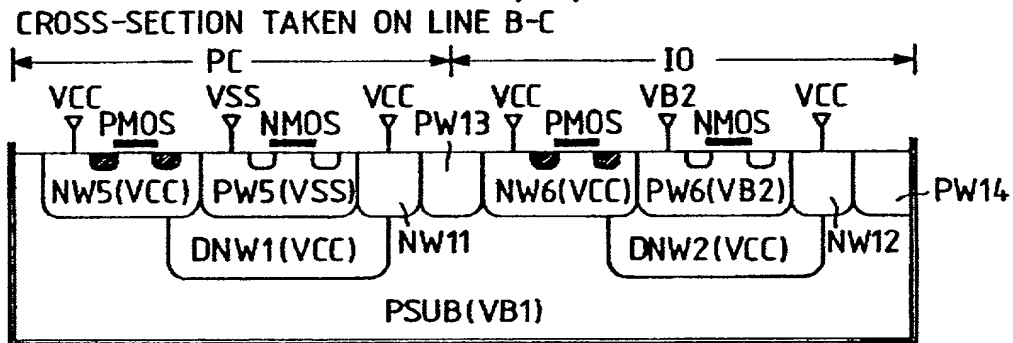
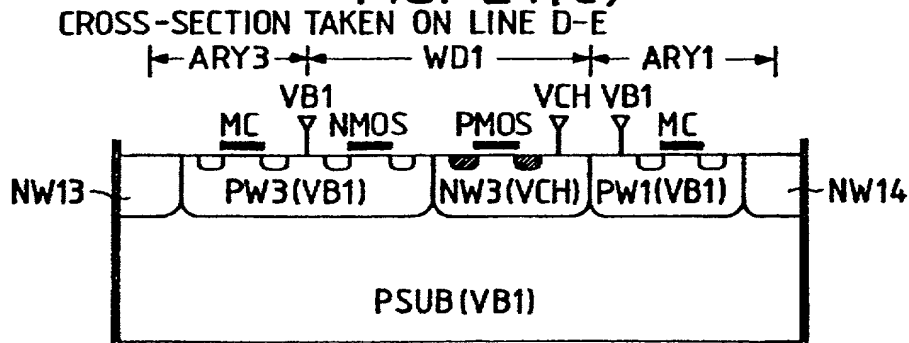




FIG. 21(C)



 : P⁺ DIFFUSION LAYER
  : N⁺ DIFFUSION LAYER

VCH=+4V VCC=+3.3V VSS=0V VB1=-1V VBB=-2V

FIG. 22(A)

CROSS-SECTION TAKEN ON LINE F-G

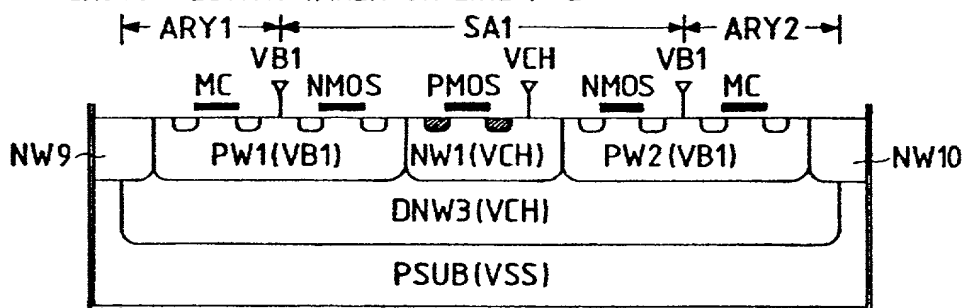


FIG. 22(B)

CROSS-SECTION TAKEN ON LINE G-H

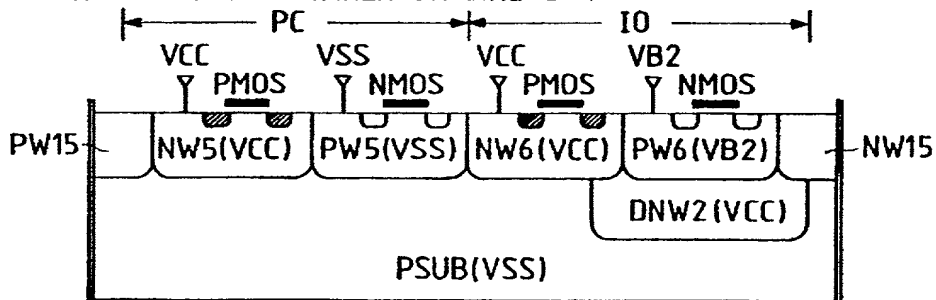
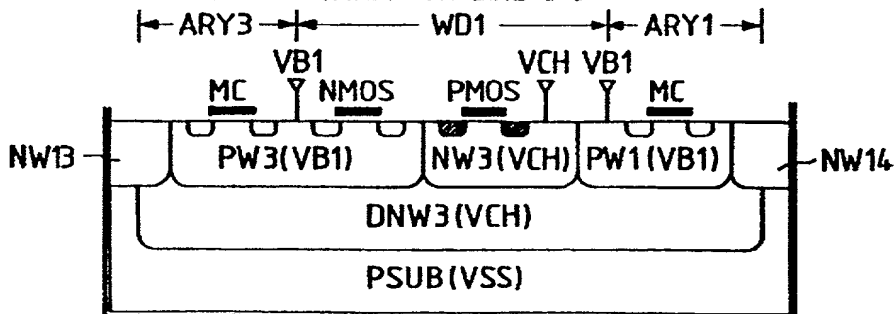


FIG. 22(C)

CROSS-SECTION TAKEN ON LINE I-J



: P⁺ DIFFUSION LAYER
 : N⁺ DIFFUSION LAYER

VCH=+4V VCC=+3.3V VSS=0V VB1=-1V VBB=-2V

FIG. 23(A)

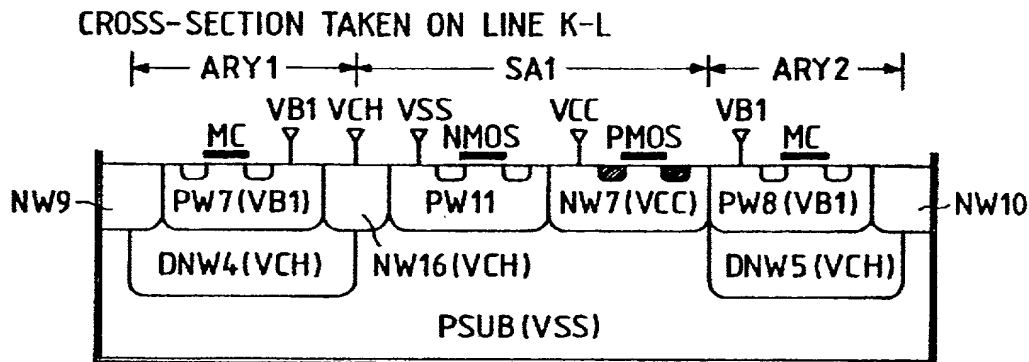


FIG. 23(B)

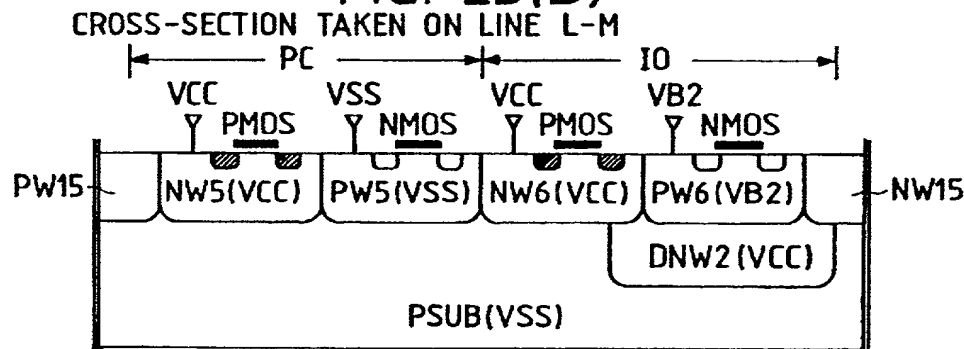
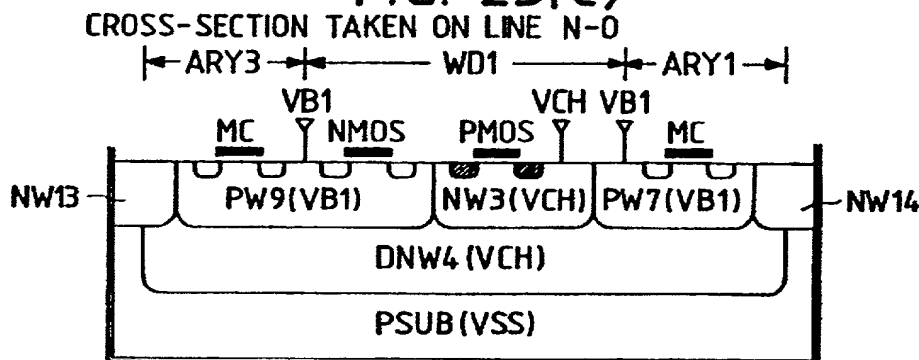


FIG. 23(C)



■: P⁺ DIFFUSION LAYER □: N⁺ DIFFUSION LAYER

VCH=+4V VCC=+3.3V VSS=0V VB1=-1V VBB=-2V

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